



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/036,920	12/21/2001	Victoria E. Milton	MS1-2569US	5060	
22801	7590 10/06/2005		EXAMINER		
LEE & HAY		MURPHY, DILLON J			
421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			ART UNIT	PAPER NUMBER	
,			2624	2624	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

··· <u> </u>		Application	on No.	Applicant(s)			
Office Action Summary		10/036,92	20	MILTON ET AL.			
		Examiner		Art Unit			
		Dillon J. M	urphy	2624			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHO WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR FOR HEVER IS LONGER, FROM THE MAILING IS IN (6) MONTHS from the mailing date of this communicate period for reply is specified above, the maximum statutory re to reply within the set or extended period for reply will, by eply received by the Office later than three months after the part of the part o	NG DATE OF TH CFR 1.136(a). In no eve ion. period will apply and wi statute, cause the apply	IIS COMMUNICATION ent, however, may a reply be tim Il expire SIX (6) MONTHS from ication to become ABANDONE	.  the mailing date of this communication.  (35 U.S.C. § 133).			
Status							
2a)□	Responsive to communication(s) filed on This action is <b>FINAL</b> . 2b) Since this application is in condition for a closed in accordance with the practice un	This action is n llowance except	on-final. for formal matters, pro	•			
Dispositi	on of Claims						
<ul> <li>4) ☐ Claim(s) 1-43 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) 22-27 is/are allowed.</li> <li>6) ☐ Claim(s) 1-8,15-21,28-35 and 41-43 is/are rejected.</li> <li>7) ☐ Claim(s) 9-14 and 36-40 is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>							
Applicati	on Papers	•					
10)⊠	The specification is objected to by the Ext The drawing(s) filed on <u>21 December 200</u> Applicant may not request that any objection Replacement drawing sheet(s) including the of The oath or declaration is objected to by the	<u>01</u> is/are: a)⊠ ac to the drawing(s) b correction is require	e held in abeyance. See ed if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority (	ınder 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachmen	t(s) te of References Cited (PTO-892)		4) Interview Summary	(PTO-413)			
2) Notice (8) Inform	the of References Cited (PTO-692) the of Draftsperson's Patent Drawing Review (PTO-9 mation Disclosure Statement(s) (PTO-1449 or PTO/ ter No(s)/Mail Date 12/22/03, 4/01/05.		Paper No(s)/Mail Da				

Art Unit: 2624

#### **DETAILED ACTION**

## Allowable Subject Matter

Claims 22-27 are allowed.

Regarding claim 22, the following is a statement of reasons for the indication of allowable subject matter:

The prior art taken singularly or in combination fails to teach a method of color profile transformation that calculates a new-color profile for a print media used in an intended printer by determining the black point difference and white point difference between two similar medium, and forming a new color profile by summing the difference of the white points and black points of the respective media.

The advantage gained over the prior art is that the new color profile derived in the instant invention considers both the white point and black point of a media in its comparison with regards to a similar media and its corresponding properties for its use in an intended printer, providing a more complete color profile of a paper / printer combination.

The closest prior art, Ohga. (US 2002/0057434), teaches a method of color profile transformation with respect to the specific white point and black point of a particular media. Ohga teaches a system and method for matching color profiles between a source and destination by considering a white point and black point of a media and the white point of the light.

Art Unit: 2624

Claims 9-14 and 36-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 15, 18, 20, 21, and 28-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Currans et al. (US 6,731,393), hereafter referred to as Currans.

Regarding claim 1, Currans teaches a method for setting a printing parameter for a print media, wherein the method comprises:

Obtaining an identifier of the print media (Currans, col 5, ln 33-42, printer automatically identifies media available for printing);

Locating a remote database containing the identifier of the print media and a property of the print media, downloading the property of the print media (Currans, col 20, ln 10-15, controller accesses data stores for information regarding media types, wherein the information is provided by network, col 5, ln 39-42); and

Art Unit: 2624

Utilizing the property of the print media to set the printing parameter (Currans, col 20, ln 47-49, media information is used to optimize printing).

Regarding claim 2, which depends from claim 1, Currans further teaches a method for setting a printing parameter for a print media, wherein obtaining the identifier is performed by a printer (Currans, col 20, ln 16-18, sensor is within printer).

Regarding claim 3, which depends from claim 1, Currans further teaches a method for setting a printing parameter for a print media, wherein obtaining the identifier includes obtaining a type of the identifier (Currans, col 20, ln 31-43, markings may either be physical or optical, and accordingly in order for the method to distinguish between the different types of markings, the printer must inherently determine the type of identifier).

Regarding claim 4, which depends from claim 1, Currans further teaches a method for setting a printing parameter for a print media, wherein the property comprises a size parameter of the print media and wherein the utilizing the property of the print media to set the printing parameter comprises utilizing the size parameter to set printing margins (Currans, col 20, ln 43-49, media attributes identified include height and width, which are further used to optimize printing, including setting of maximum margins).

Regarding claim 15, claim 15 recites identical features as claim 1 except that claim 15 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 1 are equally applicable to claim 15. Applicant's attention is further invited to col 5, In 49-56, for a computer readable medium disclosed by Currans.

Art Unit: 2624

Regarding claim 18, which depends from claim 15, claim 18 recites identical features as claim 4 except that claim 18 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 4 are equally applicable to claim 18.

Regarding claim 20, which depends from claim 15, claim 20 recites identical features as claim 2 except that claim 20 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 2 are equally applicable to claim 2.

Regarding claim 21, which depends from claim 15, claim 21 recites identical features as claim 2 except that claim 21 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 2 are equally applicable to claim 21.

Regarding claim 28, claim 28 recites identical features as claim 1 except that claim 28 is a system claim. Thus, arguments similar to that presented above for claim 1 are equally applicable to claim 28. Applicant's attention is further invited to col 4, ln 65-67, col 5, ln 1-8, teaching a document server, i.e. database, and col 5, ln 43-49, teaching printing system, disclosed by Currans.

Regarding claim 29, which depends from claim 28, claim 29 recites identical features as claim 2 except that claim 29 is a system claim. Thus, arguments similar to that presented above for claim 2 are equally applicable to claim 29. Applicant's attention is further invited to fig 22a of Currans, wherein sensor #24015 obtains identifier of print media.

Regarding claim 30, which depends from claim 28, claim 29 recites identical features as claim 3 except that claim 30 is a system claim. Thus, arguments similar to that presented above for claim 3 are equally applicable to claim 30.

Art Unit: 2624

Regarding claim 31, which depends from claim 28, claim 31 recites identical features as claim 4 except that claim 31 is a system claim. Thus, arguments similar to that presented above for claim 4 are equally applicable to claim 31.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5-7, 19, and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Currans et al. (US 6,731,393) and Blumberg et al. (US 2003/0140315), hereafter referred to as Currans and Blumberg.

Regarding claim 5, which depends from claim 1, Currans teaches a method of setting a printing parameter for a print media comprising obtaining an identifier, locating a remote database, downloading a property of the print media, and utilizing the property of the print media to set the printing parameter, as explained above in the rejection of claim 1. Currans does not disclose expressly a method of utilizing a subsection parameter to render a page. Blumberg, however, discloses a method wherein utilizing the property of the print media to set the print parameter comprises utilizing a subsection parameter to render a page (Blumberg, paragraph 186-189, wherein the

property of the print media such as paper color is incorporated into the color profiles to accurately render the image).

Currans and Blumberg are combinable because they are from a similar field of endeavor of printing systems and methods based on media parameters. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the method of Blumberg comprising utilizing a property of the print media to render a page with the method of Currans comprising obtaining an identifier, locating a remote database, downloading a property of the print media, and utilizing the property of the print media to set the printing parameter. The motivation for doing so would have been to allow a user to display a proof of how a finished document looks with the selected finishing options applied (Blumberg, paragraph 10), as well as to identify media parameters to optimize printing (Currans, col 22, ln 16-20). Therefore, it would have been obvious to combine Blumberg with Currans to obtain the invention as specified in claim 5.

Regarding claim 6, which depends from claim 5, the combination of Currans and Blumberg further teaches a method wherein the utilization of the subsection to render the page comprises creating a preview image (Blumberg, paragraph 14, method is provided for creating and viewing the content to be printed as is would appear as a finished document, if printed in accordance with the finishing options comprising media parameters).

Regarding claim 7, which depends from claim 5, the combination of Currans and Blumberg further teaches a method wherein the utilization of the subsection to render

Art Unit: 2624

the page comprises creating a template (Blumberg, paragraph 10, user is provided with customizable templates for document design).

Regarding claim 19, which depends from claim 15, claim 19 recites identical features as claim 5 except that claim 19 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 5 are equally applicable to claim 19.

Regarding claim 32, which depends from claim 28, claim 32 recites identical features as claim 5 except that claim 32 is a system claim. Thus, arguments similar to that presented above for claim 5 are equally applicable to claim 32.

Regarding claim 33, which depends from claim 32, claim 33 recites identical features as claim 6 except that claim 33 is a system claim. Thus, arguments similar to that presented above for claim 6 are equally applicable to claim 33.

Regarding claim 34, which depends from claim 32, claim 34 recites identical features as claim 7 except that claim 34 is a system claim. Thus, arguments similar to that presented above for claim 7 are equally applicable to claim 34.

Claims 8, 16, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Currans et al. (US 6,731,393) and Lubawy et al. (US 6,353,479), hereafter referred to as Currans and Lubawy.

Regarding claim 8, which depends from claim 1, Currans teaches a method of setting a printing parameter for a print media comprising obtaining an identifier, locating a remote database, downloading a property of the print media, and utilizing the property of the print media to set the printing parameter, as explained above in the rejection of

claim 1. Currans does not disclose expressly a method wherein the property comprises at least one known color profile of the print media and a known printer, and wherein the utilizing the property of the print media to set the printing parameter comprises locating a matching color profile from the at least one known color profile, wherein the matching color profile is based on the print media and an intended printer, and passing the matching color profile to a color management component. Lubawy, however, teaches a method wherein the property comprises at least one known color profile of the print media and a known printer, and wherein the utilizing the property of the print media to set the printing parameter comprises locating a matching color profile from the at least one known color profile, wherein the matching color profile is based on the print media and an intended printer, and passing the matching color profile to a color management component (Lubawy, col 4, In 8-27 for example, wherein separate media types, as identified by code reader in the printer (col 4, In 56-60), are matched to color profiles based on the print media and intended printer. After identifying the matching color profile, the print mode control module effects the printing operation).

Currans and Lubawy are combinable because they are from a similar field of endeavor of print processing based upon media parameters. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the method of Lubawy comprising locating a matching color profile based on the print media and intended printer, and passing the profile to a color management component with the method of Currans comprising obtaining an identifier, locating a remote database, downloading a property of the print media, and utilizing the property of the

print media to set the printing parameter. The motivation for doing so would have been to assure that certain types of media can be printed in a special mode with a particularly unique color map that may not be met with common printing modes (Lubawy, col 1, ln 58-62), as well as to select the correct print mode to be employed (Lubawy, col 2, ln 16-34). Therefore, it would have been obvious to combine Lubawy with Currans to obtain the invention as specified in claim 8.

Regarding claim 16, which depends from claim 15, claim 16 recites identical features as claim 8 except that claim 16 is a computer readable medium claim. Thus, arguments similar to that presented above for claim 8 are equally applicable to claim 16.

Regarding claim 35, which depends from claim 28, claim 35 recites identical features as claim 8 except that claim 35 is a system claim. Thus, arguments similar to that presented above for claim 8 are equally applicable to claim 35.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Currans et al. (US 6,731,393), Lubawy et al. (US 6,353,479), and Degani et al. (US 6,484,631), hereafter referred to as Currans, Lubawy, and Degani.

Regarding claim 17, which depends from claim 15, the combination of Currans and Lubawy teaches a computer readable medium having computer-executable instructions for setting a printing parameter for a print median, the computer-executable instructions performing steps comprising obtaining an identifier, locating a remote database, downloading a property of the print media, and utilizing the property of the print media to set the printing parameter, as explained above in the rejection of claim

15. Lubawy teaches a program comprising the steps of calculating a translated color profile by determining a difference between the best match print media calorimetric property and the print media colorimetric property, and translating the best match color profile to the translated color profile using the determined difference (Lubawy, col 7, In 4-11, wherein a new color profile is calculated by using a distance algorithm within a lookup table to map a unknown media type to a known media type, thereby associating the new media color profile with a know profile). The combination of Currans and Lubawy does not disclose expressly a program wherein the property of the print media comprises a print media colorimetric property, and wherein the step of utilizing the property of the print media to set the printing parameter comprises deriving a new color profile, the deriving comprising finding at least one similar color profile in the remote database, wherein the similar color profile is of a similar print media as the print media and a similar printer as an intended printer; finding a best match color profile of a best match print media and the similar printer from the at least one similar color profile, wherein the best match color profile minimizes a colorimetric properties difference between a best match print media colorimetric property and the print media calorimetric property and calculating the new color profile by replacing the best match print media colorimetric property in the translated color profile with the print media colorimetric property. Degani, however, teaches a program (Degani, col 3, In 1-10, program is stored and processed by system in the invention of Degani) wherein the property of the print media comprises a print media colorimetric property, and wherein the step of utilizing the property of the print media to set the printing parameter comprises deriving a new color profile, the deriving comprising: finding at least one similar color profile in the remote database, wherein the similar color profile is of a similar print media as the print media and a similar printer as an intended printer (Degani, col 4, In 1-25, wherein tone-reproduction curves, i.e. color profiles, are associated with media types. When a media type is identified, similar color profiles in regards to the printer/media combination are presented to the user), finding a best match color profile of a best match print media and the similar printer from the at least one similar color profile, wherein the best match color profile minimizes a colorimetric properties difference between a best match print media colorimetric property and the print media calorimetric property, and calculating the new color profile by replacing the best match print media colorimetric property in the translated color profile with the print media colorimetric property (Degani, col 9, In 49-67, and col 10, In 1-43, for example, halftone screens of printer/ink/media combinations are measured and calculated to minimize errors in color reproduction. Best match tone reproduction curves for the specified medium are presented to the user, and may be selected as an acceptable color profile for printing. Upon accepting the best match color profile, the tone reproduction curve is mapped to the media/halftone combination, or the user can map the new media/halftone combination to the original color profile).

Currans, Lubawy, and Degani are combinable because they are from a similar field of endeavor of mapping color profiles to identified for improved color printing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the program of Degani comprising finding a similar color profile, finding a best match color profile to minimize the colorimetric properties difference between

media, and calculating a new color profile by replacing the best match profile with the new media profile with the aforementioned combination of Currans and Lubawy comprising a program for setting a printing parameter for a print median comprising obtaining an identifier, locating a remote database, downloading a property of the print media, utilizing the property of the print media to set the printing parameter, and calculating a translated color profile by determining a difference between a best match profile and a media profile, and mapping the best match profile to the media profile. The motivation for doing so would have been to compensate and correct for the fingerprint of a printing device / media combination, and to modify the final image data to bring the output produced by the printing device back to the desired quality (Degani, col 8, ln 35-41, and col 9, 1-4). Therefore, it would have been obvious to combine Degani with the aforementioned combination of Currans and Lubawy to obtain the invention as specified in claim 17.

Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogg et al. (US 2002/0073039) and Haris et al. (US 2001/0013004), hereafter referred to as Ogg and Haris.

Regarding claim 41, Ogg teaches a user interface for setting a printing parameter for a print media, the user interface comprising a new media identifier input box (Ogg, fig 3, serial number input box #134), a new media identifier type selection (Ogg, fig 3, label type selection box (not numbered)), and a print preview display (Ogg, fig 3, print preview button (not numbered)). Ogg does not disclose expressly a user interface

Art Unit: 2624

further comprising an "add new media" option. Haris, however, teaches a user interface comprising an add new media option (Haris, fig 61, add media type #6106. Also see paragraph #232 and #233 for explanation of fig 61).

Ogg and Haris are combinable because they are from a similar field of endeavor of generating user interfaces for media consumption. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the user interface of Haris comprising the "add new media type" option with the user interface of Ogg for setting a printing parameter for a print media comprising a new media identifier input box, a new media identifier type selection, and a print preview display. The motivation for doing so would have been to enable a user to define and maintain a global table of all available media types (Haris, paragraph #232), as well as providing an easy to use interface for user interaction. Therefore, it would have been obvious to combine Haris with Ogg to obtain the invention as specified in claim 41.

Regarding claim 42, which depends from claim 41, the combination of Ogg and Haris teaches substantially the claimed invention as set forth in the discussion above for claim 41.

The combination of Ogg and Haris does not disclose expressly a user interface wherein the "add new media" option is an option in a pull down menu.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to form the "add new media" option as an option in a pull down menu.

Applicant has not disclosed that locating the "add new media" option in a pull down menu provides an advantage, is used for a particular purpose or solves a stated

Art Unit: 2624

problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the "add new media" option located as a button in the user interface (#6106 of fig 61) taught by Haris or the claimed "add new media" option located as an option in a pull down menu because a button in a pull down menu or a button outside of a pull down menu performs the same function.

Therefore, it would have been obvious to one of ordinary skill in this art to modify the combination of Ogg and Haris with the "add new media" option as located specifically in a pull down menu to obtain the invention as specified in claim 42.

Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogg et al. (US 2002/0073039), Haris et al. (US 2001/0013004), and Paczewitz (US 6,574,002), hereafter referred to as Ogg, Haris, and Paczewitz.

Regarding claim 43, which depends from claim 41, the combination of Ogg and Haris teaches a user interface for setting a printing parameter for a print media comprising an add new media option, a new media identifier input box, a new media identifier type selection, and a print preview display, as explained above in the rejection of claim 41. The combination of Ogg and Haris does not disclose expressly a user interface further comprising a new media identifier search option comprising a new media manufacturer input box and a new media type input box. Paczewitz, however, teaches a user interface for setting a printing parameter for a print media comprising a new media manufacturer input box and a new media type input box (Paczewitz, fig 3,

paper type combination box #21, wherein combination box specifies both manufacturer information and media types).

Ogg, Haris, and Paczewitz are combinable because they are all from a similar field of endeavor of supplying user interfaces to manage media types. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the user interface of Paczewitz comprising a new media search option comprising a new media manufacturer input box and a new media type input box with the combination of Ogg and Haris comprising a user interface of for setting a printing parameter for a print media comprising an add new media option, a new media identifier input box, a new media identifier type selection, and a print preview display. The motivation for doing so would have been to provide a unique user interface to select each paper type and its associated color map and dry time settings to apply selected print quality settings to a particular media (Paczewitz, col 4, In 53-65). Therefore, it would have been obvious to combine Paczewitz with the aforementioned combination of Ogg and Haris to obtain the invention as specified in claim 43.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon J. Murphy whose telephone number is (571) 272-5945. The examiner can normally be reached on M-F, 8-5.

Application/Control Number: 10/036,920 Page 17

Art Unit: 2624

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jard Moore

DAVID MOORE SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600